COATING APPARATUS AND PROCESSES FOR FORMING LOW OXIDE COATINGS

ABSTRACT

[0030] A local environmental cell for a welding spray gun includes an annular ring having a top surface and a bottom surface, wherein the annular ring is adapted for attachment to an outer perimeter of the spray gun; and a plurality of fluid passageways radially disposed about the annular ring comprising a plurality of openings in the bottom surface of the ring in fluid communication with a vacuum source for providing a vacuum thereto. The use of the local environmental cell permits deposition of local bond coats as well as minimizes the number of steps associated with welding repair processes. For example, the use of the local environmental cell permits welding and formation of a low oxide bond coat during the welding process, thereby eliminating the need for placing the substrate subsequent to a welding process in a separate spray cell to deposit the bond coating.